STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/ watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Timber Sale Name: **Alger Hardwood** *Agreement #:***: 30-76283**

2. Name of applicant: **Department of Natural Resources**

3. Address and phone number of applicant and contact person:

   Northwest Region
   919 N. Township St.
   Sedro-Woolley, WA. 98284

   Contact Person: Candace Johnson
   Phone: (360) 856-3500

4. Date checklist prepared: **4/27/2004**

5. Agency requesting checklist: **Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

   a. Auction Date: **12/13/04**
   b. Planned contract end date (but may be extended: **09/30/05**
   c. Phasing: **Not Applicable**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Timber Sale

   a. Site preparation: Treatment will be assessed in 2-3 years.
   b. Regeneration Method: Hand plant with conifer seedlings.
   c. Vegetation Management: Treatment will be assessed in 3-5 years.
   d. Thinning: Treatment will be assessed in 10-15 years.

   Roads: **New roads built to access this timber sale will be abandoned following harvest.**

   Rock Pits and/or Sale: **Rock pit associated with this proposal will be used for future road construction and maintenance.**

   Other: **None planned.**

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

   ☒*303 (d) – listed water body in WAU:* ☐*temp* ☐*sediment* ☐*completed TMDL (total maximum daily load):* **One segment of Friday Creek has been placed on the 303(d) list in 1996, 1998, and 2002; this was listed for fecal coliform. This stream is located**

approximately 3 ½ miles downstream of the proposal. For more information, see http://www.ecy.wa.gov/programs/wq/303d/index.html.

☐ *Landscape plan:* **N/A**
☒ *Watershed analysis:* **Rock pit in Section 3, Township 36 North, Range 4 East is located in the Lake Whatcom WAU.**
☐ *Interdisciplinary team (ID Team) report:* **N/A**
☒ *Road design plan:* **Contact NW Region Office.**
☐ *Wildlife report:* **N/A**
☐ *Geotechnical report:* **N/A**
☐ *Other specialist report(s):* **N/A**
☐ *Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):* **N/A**
☒ *Rock pit plan:* **See road plan available at NW Region Office.**
☒ *Other:* **Forest Resource Plan & Environmental Impact Statement, July 1992; Final Habitat Conservation Plan (HCP) and Environmental Impact Statement, September 1997; State Soil Survey, 1992.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

☒ *HPA* ☐ *Burning permit* ☐ *Shoreline permit* ☐ *Incidental take permit* ☒ *FPA #* _____ ☐ *Other:*

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

Located less than 1 mile east of Alger, WA, approximately 52 acres of mature second-growth timber within parts of sections 9 and 16 of Township 36 Range 04E were considered for harvest in the Alger Hardwood proposal. This ownership, containing primarily 78-year old red alder (RA) and western redcedar (WRC), is surrounded by DNR managed stands to the north, east and south. Private residential parcels and one privately-owned 35-acre (approximately) young stand (<5 years of age) borders the proposal to the west. The proposal is located in the Friday Creek Watershed Administrative Unit (WAU). The proposal is not in designated NRF or dispersal, nor is it in modeled or potentially suitable habitat for murrelets. In addition, the proposal is not near an occupied murrelet site nor is it in a grizzly bear management unit.

Gross Acreage: The gross acreage (proposal area excluding riparian management zone buffers located outside proposal boundaries, but including leave tree areas) totals 40.2 acres.

Timber Sale Area: The timber sale area (gross acreage minus leave tree area), as determined by GPS survey, totals 36.0 net acres. This is also referred to as "net area" or "net harvest area" in this application.

Total # of Units:	**1**
Proposal Area (acres):	**40.2 (gross), 36.0 (net)**
Estimated volume:	**1,328 MBF**
Type of harvest:	**Regeneration**
Logging system:	**Cable harvest**
Landings:	**4**
Rock pits and or sales:	**1 (Rock will be removed from existing stockpiles in an existing pit.)**
Roads:	**One temporary spur totaling 600 feet will be constructed. After harvest 4560 feet of road will be abandoned.**

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Pre-harvest stand description: Established in 1926, the proposal stands are comprised of a mixture of RA and WRC with scattered bigleaf maple (MA), Douglas fir (DF) and western hemlock (WH). A fairly even mix between hardwoods and conifers, RA represents 58% of the total number of stems per acre (SPA) with a diameter at breast height (DBH) ranging from 8 to 25 inches, and a volume of approximately 23,000 board feet per acre. WRC represents 11% of the total SPA and is found in slightly smaller size classes (DBH = 5 to 21 inches) and with a volume of 4,365 board feet per acre. DF, MA, WH, and black cottonwood (BC) represent the remaining 31% of the SPA in the stand with a volume of 11,956 board feet per acre. This information is based on a report of FRIS data run on 4/27/2004.

Field reconnaissance reveals an understory containing minimal sword fern and small numbers of WRC seedlings in the interior of the proposal and abundant salmonberry and huckleberry on the edges and in canopy openings.

Type of harvest: A regeneration harvest with 372 legacy trees left in clumps to remain for at least one more rotation.

Overall unit objectives: Generating revenue for State Forest Board – Transfer (01); protecting water quality; maintaining productivity on the site and maintaining wildlife habitat through a tree retention strategy. This proposal meets or exceeds all of the guidelines and prescriptions set forth in the DNR Habitat Conservation Plan, Forest Resource Plan, and Forest Practices Rules and Regulations.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		600	.2	--
Reconstruction		--		--
Abandonment		4,560	1.9	--
Bridge Install/Replace	0			--

Culvert Install/Replace (fish)	0			--
Culvert Install/Replace (no fish)	1			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. *(See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")*

a. Legal description:

Section 3, Township 36 North, Range 4 East, W.M. (Rockpit)
Section 9, Township 36 North, Range 4 East, W.M. (Portions of the Harvest Unit)
Section 16, Township 36 North, Range 4 East, W.M. (Portions of the Harvest Unit)

b. *Distance and direction from nearest town (include road names):*

From Burlington, the sale can be accessed by driving north on Old Highway 99 for 8.3 miles, east on Parson Creek Road for 1 mile, north on Skaarup Road for ½ mile, then continuing on the A-1000 Road and A-1200 Road for about 3 ½ miles as shown on the attached timber sale prospectus map.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")

WAU Name	WAU Acres	Proposal Acres
Friday Creek	**25,167**	**40.2 (gross), 36.0 (net)**
Sub-Basin 7	**2,354**	

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)

This single-unit 36-acre (net) proposal is at the base of Anderson Mountain (a.k.a. Alger Mountain) in the Friday Creek Watershed Administrative Unit (WAU). The Friday Creek WAU is comprised of public (i.e., federal, state (DNR-managed), municipal, county, tribal), residential, non- and industrial forest lands totaling 25,167 acres. The DNR owns 15% of the WAU (3,795 acres).

Also, the rock pit is located in the southernmost tip of the Lake Whatcom WAU. Existing stockpiles of rock located in the pit shall be removed for this project. No impact is anticipated to the WAU due to the fact that the pit is located at the southernmost tip of the WAU, no pit expansion or development will occur, and no stream channels are located in the proximity of the pit or haul route as described in the prescriptions.

Over the past seven years, the DNR has conducted even-aged and uneven-aged harvests of 550 and 7 acres, respectively, in the Friday Creek WAU. Non-DNR harvests over the same period of time have consisted of 2,859 acres of even-aged and 2,303 acres of uneven aged activities. Within the WAU, 65% of DNR-managed land is forested with trees 25 years or older. Current DNR activities within the Friday Creek WAU include the present proposal as well as the 113-acre uneven-aged DNR harvest, Shenandoah, located approximately 4 miles west of the proposal.

Environmental conditions occurring within the Friday Creek WAU include recorded presence of sensitive wildlife species as well as a lack of structural diversity due to the prevalence of young stands in the WAU. An osprey nest has been identified approximately 1 mile north of the proposal. To minimize the effects of harvesting on wildlife habitat, trees, referred to as "legacy trees", comprising 7% of the total number of trees greater than 12" DBH, will be left in clumps and spaced every 5 acres in accordance with HCP procedures. In particular, leave trees have been chosen with characteristics that have been defined as potential habitat for wildlife species. Trees with qualities such as large limbs, open crowns, runners, broken tops, and cavities have been designated for this purpose. For example, a 1.5-acre leave tree area encircles a 20" DBH, 130-foot tall, remnant DF snag. Another smaller (approximately .2 acres) clump protects a sapsucker nest in a snag. The majority (205) of the 372 total legacy trees are conifers. In addition, a riparian management zone buffer (RMZ) was established at a horizontal distance of 100 feet from either side of a Type 4 that bisects the proposal to protect the functions of the stream as well as wildlife dependant upon this habitat.

Field observations in the WAU reveal some sediment delivery to streams due to inadequate drain spacing on roads. In the proposal, 600 feet of new road will be constructed in accordance with current Forest Practice rules. These rules require cross-drain culverts be placed upstream from all stream crossings to avoid concentrating ditch water into streams. After harvest, 4560 feet of road will be abandoned following the DNR's Road Maintenance and Abandonment Plan procedures. These procedures include removing all culverts in natural drainages, constructing water bars and tank traps to prevent access to 4 wheel highway vehicles, as well as revegetating all exposed soils resulting from the abandonment work.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐Flat, ☒Rolling, ☐Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Friday Creek WAU is located in Township 37 North, Ranges 3 and 4 East, Township 36 North, Ranges 3 and 4 East, and Township 35 North, Range 4 East in Skagit and Whatcom counties. The WAU includes portions of Anderson, Blanchard, Lookout and Chuckanut Mountains. The WAU consists of 25,167 acres and has an elevation range of 100 to 2,000 feet. The major timber type is conifer with mixed hardwoods. Ages throughout the WAU are 0 to 75 years. Significant residential areas and Interstate 5 contribute to the unusually high amount of road miles in the WAU.

Located within the western hemlock zone, the largest vegetation zone in Western Washington, most forest stands in the Friday Creek WAU are dominated by western hemlock and Douglas fir. Temperatures range from 25°F to 45°F in the winter and 65°F to 75°F in the summer while prevailing winds are generally southwesterly. Average annual precipitation is 43 inches and 24-hour storm events range, on average, from 2 to 3 inches.

2) *Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).*

The proposal location is typical of the WAU.

b. What is the steepest slope on the site (approximate percent slope)?

65 percent slopes can be found on approximately 3 acres of the sale.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

State Soil Survey #	Soil Texture	% Slope	Acres	Mass Wasting Potential	Erosion Potential
8723	**V.GRAVELLY LOAM**	**15-30**	**18**	**INSIGNIFICANT**	**LOW**
8724	**V.GRAVELLY LOAM**	**30-65**	**18**	**MEDIUM**	**MEDIUM**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) *Surface indications:*

The Water & Soils Risk Assessment Map (printed April 2002) classifies the western half of the proposal, approximately 20 acres, as "unstable slopes." An on-site evaluation concluded that potentially unstable areas exist only on the very steep (inner-gorge) slopes adjacent to about 400 feet of the Type 4 stream channel west of the A-1200 Road. These slopes are located within the RMZ for the stream and, therefore, are not within the proposal.

2) *Is there evidence of natural slope failures in the sub-basin(s)?*
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

3) *Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?*
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
Associated management activity:

4) *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*
☐*No* ☐*Yes, describe similarities between the conditions and activities on these sites:*

Not applicable.

5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*

None needed.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: **.2 acres**
Approx. acreage new landings: **.5 acres (1 landing on temporary road, 3 landings on existing roads)**
Fill source: **Native material and hard rock ballast from an existing rock pit in Section 3, Township 36 North, Range 4 East, W.M.**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Little erosion is likely but some short-term surface erosion could result from spur road construction, road use or road abandonment.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):* **0%**

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

Erosion control measures include timing restrictions. No road construction, reconstruction, inactivation, or abandonment; or timber or rock haul will occur on any other existing or newly constructed roads from November 1 – March 31 unless the operator formulates an adequate plan to prevent erosion into surface waters.

In addition, road pioneering will generally not extend more than 500 feet beyond completed construction, culverts will be installed concurrently with construction of the road sub grade, and culvert outlets will not terminate on unprotected soils. Roads will be outsloped to reduce water concentration. All exposed soils resulting from road construction and abandonment will be re-vegetated. In addition, a protective cover over the revegetated area will be applied if revegetation occurs between July 1 and March 31.

Finally, riparian (RMZ) buffers as described in 3.a.1.b and c, will prevent erosion of stream banks in the vicinity of the timber harvest.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling,* automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

No emissions are anticipated other than minor amounts of equipment exhaust and road dust created by truck traffic.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Does not apply.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

If slash is burned, it will be burned in adherence to the State's Smoke Management Program.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map and forest practice base maps.)*

There is one year round stream and three seasonal streams.

a) *Downstream water bodies:*
Butler Creek, Friday Creek, Samish River

b) *Complete the following riparian & wetland management zone table:*

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Un-named Stream	**4**	**1**	**100' per side**
Un-named Streams	**5**	**2**	**0**
Un-named Stream	**Untyped ("Type 9" according to Forest Practices)**	**1**	**0**

c) *List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.*

A 100' RMZ buffer was placed on either side of the Type 4 stream. Neither harvesting nor road building will occur within this buffer.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐*No* ☒*Yes (See RMZ/WMZ table above and timber sale map.)*
Description (include culverts):

Timber will be felled and yarded immediately adjacent to the Type 5 and Type 9 streams and 100 feet from the Type 4 stream. Timber will be felled away from stream channels and will not be yarded through type 5 and 9 stream channels in a parallel direction. A bridge over a Type 4 stream and existing culverts will be removed from the existing A-1200 road.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None. Where new road construction crosses streams, culverts will be utilized so that no fill material will directly enter streams.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*
☒*No* ☐*Yes, description:*

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒*No* ☐*Yes, describe location:*

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒*No* ☐*Yes, type and volume:*

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?

The proposal is located in sub-basin 7 of the Friday Creek WAU. The majority sub basin 7 (85%) has insignificant soil mass wasting potential and the remaining area has medium and low potentials (12% and 2%). The majority of the basin (88%) also contains soils with low erosion potential and the remainder (12%) contains soils with medium erosion potential.

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☒*No* ☐*Yes, describe changes and possible causes:*

Stream networks in the Friday Creek WAU contain high and low gradient sediment source and sediment transport reaches. The low gradient channel response segments show persistent morphological adjustments. Sediment input to channels is episodic in nature, sometimes causing channel widening and deposition.

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☒*No* ☐*Yes, explain:*

This proposal is not expected to have a significant effect on stream and water quality in the vicinity. Stream buffers, reserve trees next to streams, and equipment and yarding limitations should prevent any measurable damage to water quality. All activity associated with this proposal will comply with Forest Practice standards and Habitat Conservation Plan guidelines.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?

According to the DNR's GIS report, there are 5.5 road miles per square mile in Friday Creek WAU and 5.4 road miles per square mile in sub-basin 7.

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☐*No* ☒*Yes, describe:*

This situation has been observed in other locations on Anderson Mountain, but does not occur along the A-1000 and A-1200 road leading into the proposal.

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, ***STOP HERE*** *and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.*
☒*No* ☐*Yes, approximate percent of WAU in significant ROS zone.*
Approximate percent of sub-basin(s):

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐*No* ☒*Yes, describe observations:*

The changes to stream channels described in B.3.a.8. are assumed to have occurred during periods of peak flows.

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.

The proposal is not expected to contribute significantly to peak flows because it is not located in the rain-on-snow zone.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒*No* ☐*Yes, possible impacts:*

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.

None.

b. *Ground Water*:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Not applicable.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒*No* ☐*Yes, describe:*

a) Note protection measures, if any.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water runoff will be collected by road ditches and diverted through cross drain culverts onto the forest floor, as needed. Rock energy dissipaters will be placed at culvert inlets and outlets as needed. Culverts will be placed to minimize water from other drainages entering stream channels. No impacts to ground water are expected.

2) Could waste materials enter ground or surface waters? If so, generally describe.

It is not anticipated that waste material will enter ground or surface water as a result of this proposal.

a) Note protection measures, if any.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

Existing and constructed ditches, cross drain culverts, drain dips, water bars, etc. will be used to control runoff. Straw, grass seeding or some other appropriate method will be used on any soil exposed by road construction in order to prevent sediment movement. All activities associated with this proposal will meet or exceed Forest Practices standards and Habitat Conservation plan guidelines.

4. Plants

a. Check or circle types of vegetation found on the site:

☒deciduous tree: ☒alder, ☒maple, ☐aspen, ☒*cottonwood,* ☐*western larch,* ☐*birch,* ☐other:
☒evergreen tree: ☒*Douglas fir,* ☐*grand fir,* ☐*Pacific silver fir,* ☐*ponderosa pine,* ☐*lodgepole pine,* ☒*western hemlock,* ☐*mountain hemlock,* ☐*Englemann spruce,* ☐*Sitka spruce,* ☒*red cedar,* ☐*yellow cedar,* ☐other:
☒shrubs: ☒*huckleberry,* ☒*salmonberry,* ☐*salal,* ☐*other:*
☐grass
☐pasture
☐crop or grain
☐wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☐skunk cabbage, ☐*devil's club,* ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*

An estimated 1,328 MBF of hardwood and conifer timber will be removed. Understory vegetation will be disturbed on approximately 36 acres.

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")

The proposal is primarily surrounded (to north, east, and south) by DNR-managed stands. To the north and south of the proposal lies 6-year-old DNR managed DF and WRC stands and to the east lie 15-year-old DF and WRC DNR-managed stands. Private residential parcels (5, 9, and 4 acres) that are partially forested with mixed conifers and hardwoods lie to the west of the proposal as well as one 18-acre, ~5-year-old privately-owned 35-acre DF young stands.

2) Retention tree plan:

Legacy tree levels were determined in accordance with DNR Forestry Handbook Procedure PR 14-006-090 (May 2000). In the proposed unit, a total of 372 green/wildlife trees will be retained (approximately 8 trees per acre). This represents over 7% of the stem count greater than 12"DBH, according to FRIS data. Legacy trees are clumped together to provide a diversity of upland habitat. Selected legacy trees are either in the dominant or co-dominant crown classes, containing structural characteristics important to wildlife, and indicating wind firmness. In all areas of the proposal leave trees were marked together as distinctive leave tree areas (LTAs) and marked with yellow leave tree tags. Where possible, groups were selected to minimize the likelihood of windthrow (for example, many trees located at the edge created between mature timber and a stand of young trees, were marked, since these trees have already been "wind-tested").

c. List threatened or endangered *plant* species known to be on or near the site.

None known.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The site will be planted with conifer seedlings after harvest.

5. Animal

a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☐hawk, ☐heron, ☐eagle, ☐songbirds, ☐*pigeon,* ☒other: Sapsucker, hairy woodpecker
mammals: ☒deer, ☐bear, ☐elk, ☐beaver, ☐other:
fish: ☐bass, ☒salmon, ☐trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐*talus slopes,* ☐*caves,* ☐*cliffs,* ☐*oak woodlands,* ☐*balds,* ☐*mineral springs*

b. List any threatened or endangered species known to be on or near the site *(include federal- and state-listed species).*

An osprey nest, a species of concern in Washington State, was identified 1 mile north of the site. No impacts are expected from the proposal due to this distance. Puget Sound Coho Salmon, currently a candidate for listing, have been identified downstream from the proposal in Butler Creek. Chinook Salmon have been observed downstream from Butler Creek, in Friday Creek. Puget Sound Chinook are listed as threatened. The proposal is not in designated NRF or dispersal, nor is it in modeled or potentially suitable habitat for murrelets. In addition, the proposal is not near an occupied murrelet site nor is it in a grizzly bear management unit.

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*

All of Washington State is considered part of the Pacific Flyway. No impacts are anticipated as a result of this proposal.

d. Proposed measures to preserve or enhance wildlife, if any:

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
Species/Habitat: **Fish Habitat** Protection Measures: **Stream Protection measures listed in B.3.a.1.b. and c. and B.3.a.2.**

Species/Habitat**: Mature Forest Components** Protection Measures: **Retention tree plan described in B.4.b.2.**

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does not apply.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe special emergency services that might be required.

Does not apply.

2) Proposed measures to reduce or control environmental health hazards, if any:

Does not apply.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Does not apply.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Noise from log trucks and heavy machinery will be present during daylight hours for a few months while the proposal is being harvested.

3) Proposed measures to reduce or control noise impacts, if any:

None.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? *(Site includes the complete proposal, e.g. rock pits and access roads.)*

The site and lands adjacent on the north, east, and south are used for Industrial Forestry. Private land adjacent on the west is active.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Commercial Forestland.

f. What is the current comprehensive plan designation of the site?

Forestry.

g. If applicable, what is the current shoreline master program designation of the site?

Does not apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

Timber harvest will alter the view from two primary locations along I-5 and Old Highway 99 about ½ mile apart. Neither view of the proposal area directly confronts users of either highway. The duration of the impact for a specific viewer along the I-5 corridor is approx. .5 seconds at 70 mph and 1 second from Old Highway 99 at 50 mph. See vegetation photos on the Adjacency map for this proposal at the DNR website http://www.wa.gov/dnr/ under "SEPA Center." Adjacency and WAU landscape perspective maps for this sale can also be viewed at the DNR regional office.

1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
☐*No* ☒*Yes, viewing location:*

In the vicinity of the town of Alger.

2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
☐*No* ☒*Yes, scenic corridor name:*

Interstate 5.

3) *How will this proposal affect any views described in 1) or 2) above?*

See 10b.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Other than clumping leave trees, no measures have been included in the proposal.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Does not apply.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Does not apply.

c. What existing off-site sources of light or glare may affect your proposal?

Does not apply.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Hiking and horseback riding.

b. Would the proposed project displace any existing recreational uses? If so, describe:

An old railroad grade is located both within and in the immediate vicinity of the proposal. Proposed logging operations will temporarily displace local recreational users for the duration of harvesting and immediately afterward through the accumulation of slash on the trail.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Users will be permitted to clean out the trail after the proposed operations are complete.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None known.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

Not applicable.

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

Area Native American tribes (Lummi and Nooksack) were sent a map of the proposed timber sale along with a letter requesting that they identify any issues or concerns and bring it to our attention.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

See A.12.b. and timber sale prospectus map.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?

No.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Does not apply.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

See A.11.c and road plan.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

There will be no significant impact.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

0.04 trips per day (approximately once a month) for management purposes, for the first 5-10 years after the completion of the proposal.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: _____Date: _____
Title